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REMARKS

The application has been reviewed in light of the Office Action dated February 22, 2007. Claims 1-18 are pending, with claims 5-18 having been withdrawn by the Patent Office from examination. By this Amendment, claims 1 and 4 have been amended to clarify the claimed subject matter, and claim 4 has been amended by rewriting the claim in independent form. Accordingly claims 1-4 are presented for reconsideration, with claims 1 and 4 being in independent form.

Claims 1-4 were rejected under 35 U.S.C. §112, second paragraph, as allegedly indefinite.

By this Amendment, claims 1 and 4 have been amended to clarify the claimed subject matter, and more specifically that plural sections between the part and adhering target are coated with a light energy curable adhesive and irradiating light energy is irradiated to the light energy curable adhesive at one or more of the plural sections.

Withdrawal of the rejection under 35 U.S.C. §112, second paragraph, is respectfully requested.

Claims 1-3 were rejected under 35 U.S.C. § 103(a) as purportedly unpatentable over Fujioka et al. (US 2003/0006004 A1) in view of Yamaguchi et al. (US 2002/0134515 A1) in view of Holmes (US 2004/0111913 A1).

Applicant has carefully considered the Examiner's comments and the cited art, and respectfully submits that independent claim 1 is patentable over the cited art, for at least the following reasons.

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The present application relates to adhering parts to a target with light energy curable adhesive, and is directed to the problem that the light energy curable adhesive shrinks when light energy is applied thereto, and such curing shrinkage generates stress (from curing shrinkage force) which causes lateral displacement relatively between a part and a target, and thereby presenting an obstacle to precise assembly of the part to the target.

Applicant devised an improved approach for adhering parts to a target with light energy curable adhesive which includes adjusting irradiation energy to a selected area of adhesive to offset stresses generated by the curing shrinkage forces and thereby minimize (or overcome) such lateral displacement. Independent claims 1 and 4 addresses these features, as well as additional features. For example, claim 1 as amended includes the feature of "changing irradiation energy such that the light energy curable adhesive at *selected ones of the plural sections* experiences a change in irradiation energy when the part and the target are relatively displaced from each other in the course of shrinkage of the light energy curable adhesive so that at least one of the curing shrinkage forces can be changed and stresses generated by the curing shrinkage forces can be offset".

Fujioka, as understood by Applicant, proposes a disk bonding apparatus wherein a radiation curable resin is applied between two substrates to bond the two substrates, and radioactive rays are applied from both sides of the substrates to cure the resin. Fujioka proposes adjusting the irradiation start times of the irradiation rays from the respective sides to control an amount of warpage of each substrate after curing.

Fujioka does not teach or suggest selectively irradiating a particular area to control the shrinkage of the adhesive.

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Yamaguchi, as understood by Applicant, proposes a plate bonding system for bonding two substrate discs with adhesive, wherein an electric field is applied in the interspace between the two substrate discs. Yamaguchi proposes that, in order to reduce the initial contact area of adhesive between the substrates, the electric field is applied to deform the adhesive into a tapered form.

Although the system proposed by Yamaguchi includes a curing section for curing the adhesive between the substrates, Yamaguchi, like Fujioka, does not teach or suggest selectively irradiating a particular area to control the shrinkage of the adhesive.

Holmes, as understood by Applicant, proposes an electromagnetic energy spot curing system which can be used for curing an adhesive, wherein a light emission intensity is changed by using a template that moves relatively in relation to an ultraviolet lamp. The template includes several holes having increasing diameters in an arch state at a prescribed position distanced from a rotational axis, thereby linearly adjusting an intensity of energy applied to curable resin or the like by controlling a rotational angle of the template.

However, Holmes, like Yamaguchi and Fujioka, does not teach or suggest selectively irradiating a particular area to control the shrinkage of the adhesive.

Applicant does not find teaching or suggestion in the cited art of a method for adhering parts to a target with light energy curable adhesive, comprising "changing irradiation energy such that the light energy curable adhesive at *selected ones of the plural sections* experiences a change in irradiation energy when the part and the target are relatively displaced from each other in the course of shrinkage of the light energy curable adhesive so that at least one of the curing shrinkage forces can be changed and stresses generated by the curing shrinkage forces can be

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offset", as provided by the subject matter of claim 1 of the present application.

Accordingly, for at least the above-stated reasons, Applicant respectfully submits that independent claim 1 and the claims depending therefrom are patentable over the cited art.

The Office Action indicates that claim 4 was objected to as being dependent upon a rejected base claim but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims, and to overcome the rejection under 35 U.S.C. §112, second paragraph.

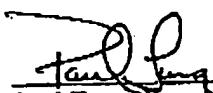
By this Amendment, claim 4 has been amended by rewriting the claim in independent form and to clarify the claimed subject matter.

In view of the amendments to the claims and remarks hereinabove, Applicant submits that the application is now in condition for allowance. Accordingly, Applicant earnestly solicits the allowance of the application.

If a petition for an extension of time is required to make this response timely, this paper should be considered to be such a petition. The Patent Office is hereby authorized to charge any fees that are required in connection with this amendment and to credit any overpayment to our Deposit Account No. 03-3125.

If a telephone interview could advance the prosecution of this application, the Examiner is respectfully requested to call the undersigned attorney.

Respectfully submitted,

  
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